

## ADAPTIVE POWER AMPLIFIER SYSTEM

### ABSTRACT

The present invention provides a power amplifier system in which one or more power amplifiers may be inserted. The occupancy of ports by power amplifiers is monitored by a controller. The system has a plurality of output lines, each with different electrical line characteristics. The controller is responsive to ports becoming occupied or unoccupied by power amplifiers and routes the output signal through the output line having the electrical line characteristics that ensure an efficient signal transfer. Further, the switching configuration of the present invention eliminates the need for output signals to traverse through a switch.